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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,986	11/16/2001	Ana M. Tessadro	109943	8036

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EXAMINER

MARIAM, DANIEL G

ART UNIT PAPER NUMBER

2621

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,986

Applicant(s)

TESSADRO, ANA M.

Examiner

DANIEL G MARIAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/02/2002</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawing (Fig. 16) received on March 10, 2003 is not acceptable. Corrections to the drawings must be made in the form of replacement sheets, labeled, in the header, "Replacement Sheet" since the Office does not release drawings for correction. See 37 CFR 1.85. Failure to timely submit the proposed drawing correction in the form identified above will result in the abandonment of the application.

Claim Objections

2. Claim 3 is objected to because of the following informalities: claim 3 in its entirety is incorporated in claim 2. Each claim should begin with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations. Appropriate correction is required.

3. Claim 1 recites the limitation "the pseudo-image" in line 15, and appears to be grammatically incorrect. Deleting this limitation entirely may modify it. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 36 and 41 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for edge detection, does not reasonably provide enablement for detecting the edges based on first and second modes using image texture characteristic and

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characteristics other than image texture. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. How do you generate or set the modes using the texture or characteristics excluding the texture.

6. Claims 32-35 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for determination of boundary location, does not reasonably provide enablement for determining the boundary location with “a resolution better than 5, 25, and 100 microns” on the object imaged by the machine vision system, and “with a sub-pixel resolution” relative to the image of the object image by the machine vision system. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Where does the resolution being identified and analyzed during the determination of the boundary location?

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 26, 36, and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, recites the limitation “the boundary location useable as a dimensional inspection measurement for the object imaged by the machine vision system” in lines 17-18. It is unclear how the determined boundary location is used as a dimensional inspection measurement for the imaged object. Likewise a similar limitation is also recited in claims 26, 36, and 41. Please clarify.

Since claims 2-25, 27-35, 37-39, directly or indirectly depend on claims 1 and 26, they

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are also rejected under 35 U.S.C. 112, second paragraph, for the same reason set forth above for claims 1 and 26.

9. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation “generating a pseudo-image . . . based on at least one image texture filtering element pre-selected based on an analysis of previous similar-case boundary” is unclear. What prior similar-case boundary analysis is carried out to pre-select the at least one image texture filtering element? Please clarify.

10. Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation “a boundary locating and refining section that analyzes the one or more estimated edge points to determine if they correspond to criteria for a reliable edge” is unclear. Does this mean the boundary locating and refining are performed simultaneously or separately using the estimated edge points or the refining operation is performed using some additional information? Please clarify.

11. Claims 37-39 recite the limitations such as “first and second modes”. There is insufficient antecedent basis for this limitation in the claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 4910786, 5115476, 5392137, 5692072, 6078680, 6137893, 6233060, 6259823, 6701005; and a publication to: Will, et al. “On learning texture edge

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detectors”, and Zhu, et al. “Region competition: unifying snakes, region growing, and Bayes/MDL for multiband image segmentation”.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, LEO BOUDREAU can be reached on 703-305-4607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DANIEL MIRIAM
PRIMARY EXAMINER

December 17, 2004